

Chapter 3

Is the idea of “creation-order” still fruitful?

Danie Strauss

Summary and introduction

Dooyeweerd noted that the idea of cosmic order is present throughout the history of philosophy. Plato and Aristotle wrestled in their own distinctive way with either the *law for* or the *lawfulness* of the cosmos. Some of the key elements of the subsequent history of this reflection are analyzed before it is explained how Dooyeweerd interpreted the idea of a cosmic order as equivalent to the idea of a God-given law-order. Modern nominalism challenged the Greek-Medieval realistic metaphysics by eliminating what Christianity saw as the God-given *order for* (law for) creatures and the *orderliness* of creatures. A new concept of truth emerged, accompanied by a rejection of universality outside the human mind. This approach eliminated any God-given order for and every law-conformity of creatures. What remains is a structureless and chaotic reality, creating a vacuum quickly filled by nominalism, for now human understanding took over the role of law-giver. Kant explicitly does not derive the categories of thought from nature, but prescribes them to nature. The move towards historicism and the linguistic turn achieves the extreme opposite, because it opened up the way for an unbridled irrationalism and relativism, sometimes camouflaged by the pretence that the human subject is a law unto itself. All of this adds up to a systematic elimination of the idea of a creational order. Clearly these diverging developments bring to expression the abyss between the spirit of modern Humanism and reformational Christianity. An alternative option is present within reformational philosophy where the idea of a creational order turns away from an epistemic point of departure (such as in the philosophy of Kant), towards an ontic perspective, making possible an alternative approach to the various dimensions of reality. This new approach is designated as the transcendental-empirical method. It advances a new way of articulating the foundational role of a creational order or a cosmic law-order. This is illustrated by providing a definition of a natural law and of norming principles. The argument concludes by pointing out that the future of the idea of a creational order depends on a proper understanding of the constancy and universality of such an order – embedded in a non-reductionist ontology.

How did the idea of cosmic order permeate the history of philosophy?

Dooyeweerd's decision to designate his philosophy as the *philosophy of the law-idea* (wetsidee – *Philosophy of the Cosmonomic Idea*) was informed by the fact that during the history of philosophy various prominent philosophers explicitly connected their philosophical reflection to the idea of an encompassing cosmic order. Different philosophical systems, from Greek Antiquity and Medieval philosophy up to Modern philosophy, “expressly orientated philosophic thought to the Idea of a divine world-order, which was qualified as *lex naturalis*, *lex aeterna*, *harmonia praestabilita*, etc.” (Dooyeweerd, 1997-I:93-94). But let us first consider the question how the idea of cosmic order did permeate the history of philosophy. From the

outset Dooyeweerd was concerned with the world and life views and ultimate commitments surfacing in philosophical ideas of cosmic order. He noticed that Western philosophy originated in Greek antiquity and was transformed during the medieval period by attempting to obtain a synthesis between Greek philosophy and biblical Christianity. Since the Renaissance modern Humanism transformed the Greek-Medieval legacy as well as Christendom into the new humanistic motive of a free and autonomous human personality which in turn gave birth to an encompassing natural science ideal. The tension was immediately manifest, for if reality is entirely explained in terms of a deterministic understanding of cause and effect, then the assumed human freedom is also reduced to a cause among the causes and an effect among the effects. In his work on the *Roots of Western Culture* Dooyeweerd shows how this humanistic personality ideal generated the modern natural science-ideal (see pages 149-217).

Dooyeweerd designated the basic dualism present in Greek culture as that between two original and opposing principles (*Archai*), namely *matter* and *form*. Within Greek philosophy itself these mutually excluding principles of origin are also designated by the opposition between the *one* and the *many*, between what is *static* and *dynamic* and between what is *constant* and *changing*. Dooyeweerd provides us with an extensive analysis of how these two poles of the basic motive of Greek philosophy commenced by giving primacy to the *matter pole* (the pole of the formless stream of life) but eventually switched to giving priority to the *form pole* (the motive of form, measure and harmony). Since both these principles are persistently present in the thought of the Greek philosophers, the only option was to give primacy to the one or the other. Heraclitus, for example, accentuates changefulness and at the same time accepts the *world law* (*logos*) as an untransgressable measure (i.e., as something constant): “The sun will not transgress his measures: were he to do so, the Erinyes, abettors of Justice, would overtake him” (Comperz, 1964:73).

In the thought of Plato the problem of change is approached on the basis of what is enduring. If the world of becoming (of sense perception) is in a state of continuous flux, nothing could be known. Therefore, Plato postulated supra-sensory ontic forms (*eidè*) to account for knowledge (see *Cratylus* 439 c–440 a). He had learned from Heraclitus that all things accessible to sensory perception are in an ever-fluctuating state. It is therefore impossible to know these things. This conclusion rests on the presupposition that everything is changing. But in that case what Plato considers to be the essential being of things (their static *eidòs*), should also be constantly changing. However, this is unacceptable to Plato. His desire is to acknowledge that the so-called essence of things could not also be subject to continuous change.

In his dialogue *Phaedo* Plato characterizes the domain of the static *eidè* as being divine, immortal, conceivable, simple, indissoluble, constant and “self-identical” (80b:1–6). This shows that Plato stumbled upon what Dooyeweerd designates as God's law for creatures. The tension present within the Greek motive of matter and form is strikingly highlighted in the absence of an *eidòs* (ontic form) for matter (the formless – see Dooyeweerd, 1977-II:9). Aristotle did not acknowledge Plato's transcendent realm of *eidè*. He introduced (as a so-called secondary substance), i.e., the universal substantial forms inherent to things. This universal form (*formula*) is not subject to becoming. The “being of house is not generated, but only the being of *this* house” (cf. *Metaph.*, 1039 b 23; cf. *De Anima*, 412 b 16 ff.). The

houseness of a house, its *being-a-house* is the universal way in which any particular (individual) house shows that it conforms to the conditions (law) for being a house. The key terms employed in this context are that of the idea of orderliness, lawfulness or law-conformity. Only what is subject to an *order for* or to a *law for* can display the feature of being *law-conformative* or *orderly*. This entails that the terms “law” and “order” may be used as synonyms. In general, Dooyeweerd holds that the law for or the order for creatures is delimiting and determining their existence. We shall return to this point below. Cicero prefers to designate the world-order by employing the expression *natural law* or a *lex naturalis*. Compare in this connection his work “De republica” (Book 3, Chapter 22) as well as his “De Officiis.”

The synthesis between the Greek basic motive of matter and form and the biblical motive of creation, fall into sin and redemption resulted in a new basic motive, namely that of *nature* and *grace*. The form-matter split now appears both within the nature pole and the grace pole. Thomas Aquinas' law-idea accepts the dual teleological order of Aristotle, accommodated within the new nature-grace divide. As the encompassing community within the natural domain, the state merely serves as the natural foundation (*matter*) for the church as overarching superstructure, as the supernatural institute of grace (the *form*). The state carries human beings to their highest natural aim in life, namely goodness (within the *societas perfecta*), whereas the church elevates them to their supertemporal perfection, *eternal bliss* (the church institute as *Corpus Christianum*).¹

The cosmonomic idea of the realistic metaphysics of the medieval era accommodated Plato's ontic forms as *ideas in God's Mind* (*universalia ante rem*), whereas the universal substantial forms of Aristotle became *universals inhering* in individual things (*universalia in re*).

Denying the order for and orderliness of creation

The challenge to this reigning medieval cosmonomic idea came from late Scholastic nominalism. This movement denied both the *universalia ante rem* (before creation in God's mind) and the *universalia in re* (inherent in things). We noted that this distinction pertains to God's *law for* creatures and the *orderliness of* creatures. Nominalism rejects universality outside the human mind, both in respect of the ideas in God's mind and regarding the universal substantial forms inherent in things. In doing this it at once eliminates the God-given *order for* (law for) creatures and the *orderliness of* creatures. But when creation is stripped from God's determining and delimiting law as well as of its law-conformity, then reality collapses into a *chaotic multiplicity* of (structureless) *individual* entities.

This created a vacuum, that was soon filled by an overestimation of human understanding. Von Weizsäcker realizes this transition very well: “This state of affairs is characteristic of modernity. It is not the world in which I find myself that guarantees my existence. This guarantee is not lost, for when I recover the world then it is as the object of my self-assured thinking, that is to say, as an object which I can manipulate” (Von Weizsäcker, 2002:130-131). It should not be surprising that this new inclination soon gave rise to the ideal of *logical creation*. At the same time the classical realistic view that truth is the *correspondence of*

¹ The persistence of this view is still found in the famous papal encyclical, *Quadragesimo anno* (15 May 1931), which explicitly states: “Surely the church does not only have the task to bring the human person merely to a transient and deficient happiness, for it must carry a person to eternal bliss” (cf. Schnatz, 1973:403).

thought and *being* (reality – *adequatio intellectus et rei*) was challenged. For nominalism truth only involves *compatibility of concepts*. Ernst Cassirer explains this by saying that truth is not inherent to things since it belongs to the names and their comparison as it occurs in statements (see Hobbes, *De Corpore*, Part I, Chapter 3, Par.7 & 8, quoted by Cassirer, 1971:56).

Since Descartes modern nominalism has considered (number and) all universals as mere *modes of thought*. Galileo envisaged a thought experiment – regarding a body in motion – from which he deduced the *law of inertia*. It inspired Immanuel Kant to elaborate this new motive of *logical creation* to its extreme rationalistic consequences.²

Kant takes the thought experiment of Galileo a step further because he wants to understand how it is possible to formulate such a thought experiment, deduce from it a *law of nature* and then apply it to things in nature. His solution carries the rationalistic element present in nominalism to its ultimate consequences because he elevates human understanding (and the thought categories) to be the *a priori* formal law-giver of nature.³

The supreme reign of conceptual rationalism was soon undermined by the element of *relativity* carried to its extreme by historicism at the beginning of the 19th century. The preceding 18th century is the era of conceptual rationalism, followed by romanticism and post-Kantian freedom-idealism. Enlightenment was both rationalistic and individualistic.

Romanticism initially switched to an irrationalistic individualism but owing to its anarchistic consequences it moved on to a full-blown irrationalistic universalism. Throughout this development Humanism remained faithful to its inherent ideal of autonomy. Rationalism turned the subject (*autos*) into a mere reflex of the universal law (compare Kant's categorical imperative), whereas irrationalism explored the opposite direction by giving primacy to subjectivity – with law merely reflecting what is unique and individual: whether *autos* or *nomos* the end-result it still *auto-nomy*.

The influence of historicism increasingly questioned the supposed universally valid construction of reality by human reason, though at once it turned into a victim of the *relativistic* consequences of its own orientation. In combination with the *linguistic turn* by the end of the 19th century and the beginning of the 20th century, this process inspired the idea that the life-world of a person is the product of one's own making and that social reality is also solely a human construction.⁴ All of this unfolded against the background of the linguistic turn which switched from the cause-effect relation – the stronghold of the classical humanistic science ideal – to *meaning* and *interpretation* (see Appleby *et al*, 1996:1). The emphasis on language reinforced the relativism of historicism because every interpretation calls forth a

² In general Dooyeweerd defines *rationalism* as an absolutization of the law side of reality and *irrationalism* as the absolutization of the (individual) factual side of reality. However, if one accepts universality on the factual side of reality and in addition accepts that conceptual knowledge always embraces what is universal (either the universal law for or the universality of what is lawful), it is clear that one should rather say that rationalism absolutizes conceptual knowledge and that irrationalism absolutizes idea-knowledge (that is, concept-transcending knowledge). Interestingly, in his contribution to the *Festschrift* of Van Til, Dooyeweerd actually defines rationalism correctly: “Rationalism as absolutization of conceptual thought ...” (Dooyeweerd, 1971:83). Nominalism is rationalistic and irrationalistic at once, for it acknowledges universality within the human mind and what is purely individual outside the human mind.

³ “Understanding creates its laws (*a priori*) not out of nature, but prescribes them to nature” (Kant, 1783, II:320; § 36). See also Holz, 1975:345-358).

⁴ The titles of the following books underscore this development: *The Social Construction of Reality; a Treatise in the Sociology of Knowledge* (Luckmann & Berger, 1969); and *Der sinnhafte Aufbau der sozialen Welt* (“The meaningful construction of the social world” Schutz, 1974).

(slightly) different interpretation. For this reason, *postmodernism* embodies the combining force of historicism and the linguistic turn which increased the threat of relativism. The initial claim that everything is subject to historical change is taken further in the claim that everything is interpretation.

In spite of diverse attempts to relativize human endeavours, also found in the developments within the neo-Kantian Baden school of thought (including Windelband, Rickert and Weber), all these attempts continually got stuck in conditions for *logicality*, *historicity* and *linguisticity* which are all *universal features* holding for being human.

How does the idea of creation order relate to the idea of a cosmic order and law order in reformational philosophy?

Dooyeweerd notes that Abraham Kuyper “pointed out that the great movement of the Reformation could not continue to be restricted to the reformation of the church because its “biblical point of departure touched the religious root of the whole of temporal life and had to assert its validity in all of its sectors.” Kuyper “began to speak of ‘Calvinism’ as an all-embracing world view which was clearly distinguishable from both Roman Catholicism and Humanism” (Dooyeweerd, 2013:1). Yet later on Dooyeweerd rejected the term “Calvinistic” and simply preferred to speak about “Christian philosophy” without any further qualification (Dooyeweerd, 1997-I:524). One of the lasting expressions eventually employed to designate this philosophical trend is “reformational philosophy.”

God is not subject to laws, but He is also not arbitrary

In their reformational philosophy Dooyeweerd and Vollenhoven distinguish between God and creation – with “law” as the boundary connecting God and creation. Vollenhoven points out that the expression “Deus legibus solutus” is derived from Calvin who opposed aristocratic nominalism which accepted the absoluteness of monarchical power (Vollenhoven, 1933:295-296).⁵ Dooyeweerd mentions that Duns Scotus at least wanted to tie the absolute despotic power of God (*potestas Dei absoluta*) to the first table of the law, as an expression of “God's holy and good Being.” However, Ockham's appeal to God's despotic arbitrariness led to the subsequent process of secularization of modern Humanism (Dooyeweerd, 1997-I:186 ff.). The way in which Calvin side-stepped the unacceptable position of nominalism concerns his acknowledgement of the elevation of God above His law for creation. Although God is not subject to His creational law, in His providential care He is faithful to His law – without becoming lawless or arbitrary. The classical formulation is: *Deus legibus solutus est, sed non exlex* (God is not subject to laws, but He is also not arbitrary). Bohatec adds that for Calvin God's almighty will is arranged by equity and by what is just (see Bohatec, 1940:1-28). In the first Volume of his *A New Critique of Theoretical Thought* Dooyeweerd explains his assessment of Occam's position under the heading: “The nominalistic conception of the *potestas Dei absoluta* entirely contrary to its own intention places God's Creative Will under the boundary-line of the *lex* (Dooyeweerd, 1997-I:186-188). Occam allows for the possibility

⁵ In Vollenhoven's Notes [*Aantekeningen*] to this work he mentions places in the writings of Calvin where this formulation is found (page 27): “The places are De aeterna-praedestinatione, 1552 (Corpus reformatorum 36, column 361) and Commentarius in Mosis libros V, 1563 (Corpus ref. 52, column 49 and 131)” (see footnote 480).

that God just as well could have sanctioned an “egoistic” ethics and even holds that the first table of the decalogue is “a mere product of divine arbitrariness” (Dooyeweerd, 1997-I:187). However, Dooyeweerd correctly points out that “arbitrariness” presupposes a normative standard violated by antinormative (arbitrary) actions. Ascribing arbitrariness to God, places God's will under the borderline of the law (*lex*).

When the *Free University* was established in 1880 it was a result of drivenness by the Christian life and world view. Kuyper aimed at a university free from the interference of both church and state. At the moment Western culture currently experiences a situation in which the Christian life and world view is still threatened by non-Christian orientations – mainly physicalistic and evolutionistic in nature. Kuyper's assessment in 1892 still holds today: “The theory of evolution is the ‘formulary of unity’ ..., which currently unites all priests of modern science in their secularized temple” (quoted by Zwaan, 1977:40).⁶

The encompassing ontic scope of the creation order: its four dimensions

When Kuyper discusses the “ordinances of God” (such as in Kuyper, 1959:56) he knows that the term *law* does not merely intend the “Ten Commandments; not even the Mosaic law, nor the moral or ceremonial law.” Instead, “what must come into view is that whole concatenation of laws, in every creaturely thing, by which everything exists that God created on, or above, or under the earth” (quoted by Veenhof, 1939:30).

This perspective highlights the idea that there is a cosmic order or creation order. But it was Dooyeweerd who elaborated these seminal insights into a more articulate understanding of the creation order (cosmic order). He does that by distinguishing between four dimensions within created reality: (i) the central religious dimension, subject to the central command of love; (ii) the dimension of cosmic time; (iii) the dimension of modal aspects; and (iv) the dimension of individuality-structures (see the *Introductory* chapter where Gerrit Glas articulates a brief understanding of these basic distinctions within reformational philosophy).

Ground-motive and ground-idea

Within each one of these cosmic dimensions a strict correlation between law (law-side) and factual side (sometimes also designated as subject side) prevails. Furthermore, on the factual side one finds subject-subject relations and subject-object relations (except for the numerical aspect in which solely subject-subject relations are present). According to Dooyeweerd theoretical thinking finds its religious starting point in the central ground-motive operative in the root of humankind – these (above-mentioned) ground-motives are therefore communal in character (the form and matter motive; the biblical motive of creation, fall into sin and redemption through Christ in the communion of the Holy Spirit; the scholastic motive of nature and grace; and the modern humanistic motive of nature and freedom – see Dooyeweerd, 2012).

Whereas the ground-motive directing human life from its core is supra-theoretic, every scholarly (scientific) act proceeds on the basis of a triunity of (transcendental) ideas, concerning the diversity and coherence, the radical unity and the ultimate origin of the universe. The term “transcendental” here intends to capture those conditions (law-order) which make our experience of reality possible. Taken together Dooyeweerd refers to them as

⁶ “... de evolutietheorie is het ‘formulier van eenigheid’, dat op dit oogenblik alle priesters der moderne wetenschap in hun gesecculariseerden tempel vereenigt.”

the transcendental ground-idea of philosophy. The transcendental ground-idea, as directed by the biblical basic motive, represents what Dooyeweerd initially intended with the Dutch title of his magnum opus, *De Wijsbegeerte der Wetsidee*. The triunity of transcendental ideas, the *transcendental ground-idea* of philosophy, cannot be deduced from its ground-motive.

Ismic orientations embody alternative transcendental ground-ideas

Since the history of philosophy and the special sciences are constantly burdened by multiple one-sided monistic orientations, such as the mechanistic main tendency of classical physics, subsequent materialistic physicalism, biologicistic vitalism, psychologism, logicism, historicism, and so on – it should be kept in mind that each one of them depends upon a specific transcendental idea regarding the diversity of modal aspects. Every *ismic* stance did discern a genuine structural element of God's creation order, however much it may be distorted by its reification or absolutization. Before a scholar criticizes a particular *ismic* orientation, the following question ought to be answered: what feature of the creation order was noticed in such an orientation? Clearly, without detecting the numerical aspect first it would be impossible to develop a distorting arithmeticistic perspective on it.⁷ The same applies to the other just-mentioned monistic orientations. All of them proceed from a particular transcendental idea regarding the unity and diversity within reality.

Moreover, if the notion of a creation order is equivalent to the idea of a *cosmic law-order* then a crucial issue would be to develop a more precise idea of what a *law* in an ontic sense is – keeping in mind that ontic laws are not merely *epistemic* in nature, such as found in the nominalistic conviction of Descartes who asserts that “number and all universals are mere modes of thought” (*Principles of Philosophy*, Part I, LVII) or in Kant's above-mentioned view of human understanding as the *formal law-giver of nature*.

Articulating the idea of ontic laws and ontic principles: the transcendental-empirical method

Dooyeweerd had a sound understanding of the destructive effects of modern nominalism, particularly regarding its rejection of ontic universality. Unfortunately he did not escape from its after-effects because he accepts the nominalistic legacy by denying the universality of factual reality and – as a consequence – by identifying law and lawfulness.

From the perspective of the history of philosophy Dooyeweerd's reformational philosophy is unique in the way it identifies and distinguishes between the dimension of cosmic time, the dimension of modal aspects and the dimension of concrete (multi-aspectual) entities (designated by him as individuality-structures).

The idea of a creation order entails that these dimensions of reality are lying at the basis of our experience of reality – in the transcendental sense of making it *possible*. Investigating what makes our experience possible is actually directed at God's law-order. Another way to address this state of affairs is to depict it as a *transcendental-empirical* method of research. The physicist Stafleu and the jurist scholar Hommes prefer to designate Dooyeweerd's new approach as employing a *transcendental-empirical method*. One of the reasons for the

⁷ Kurt Gödel was very “fond of an observation that he attributes to Bernays”: that a “flower has five petals is as much part of objective reality as that its color is red” (quoted by Wang, 1988:202). To account for “mathematical objects” Gödel who introduces the idea of “semiperceptions” which may represent “an aspect of objective reality” (quoted by Wang, 1988:304).

powerful impact of this method is certainly related to the intermodal criterion of truth which it employs. A mere logical contradiction remains enclosed within the sphere of logic, because logic can only assert that two contradictory statements cannot both be true at the same time, as already observed by Kant (1787-B:84). But it cannot tell which one is true. It is the principle of sufficient ground (reason) that directs thought beyond the confines of logic. Yet it is the irreducibility of the various aspects of reality that serves as the foundation for the more-than-logical ontic principle of truth, the principle of the excluded antinomy (*principium exclusae antinomiae*). Confusing two spatial figures, such as a square and a circle is *intra*-modal because it concerns realities within one aspect only.⁸ But confusing two distinct aspects, such as the aspects of space and movement in Zeno's paradoxes, gives rise to an inter-modal clash of laws, a genuine *antinomy* (anti = against; nomos = law).

The transcendental-empirical method is a straightforward exploration of the idea of a creational order or a cosmic law-order. Accepting this method entails a rejection of the biblicistic idea that the creation order is revealed in Scriptures. It explains Dooyeweerd's opposition to every conception of "a scriptural philosophy that looks for support in specific Bible texts for intrinsically philosophical and in general scholarly problems and theories. It actually merely boils down to 'positing a few privileged issues' about which the Bible would give explicit statements, while for the rest, where such special texts are not found, one at leisure can continue to fit into a mode of thinking driven by intrinsically un-biblical motives" (pages 3-4).⁹

The transcendental-empirical method has an inherent dynamic openness:

- (i) By virtue of the radical depth of sin all human insights (also those discovered by applying the transcendental-empirical method) remain *provisional, fallible* and *open to improvement*.
- (ii) The wealth of human experience, embedded in God's creational order, is constantly deepened through scientific and technical advances, implying that every investigation may be altered and or even refuted in the light of discovering new states of affairs.

Moreover, the idea of a creation order also entails a non-reductionist approach, rejecting absolutizing or deifying anything within creation. At the same time a non-reductionist ontology in principle takes serious the principle of the excluded antinomy.

The idea of a creational order: modal laws and type laws

Introducing this distinction should be seen as the reaction of reformational philosophy to the above-mentioned Greek-Medieval legacy of the *substance* concept and the modern inclination to overemphasize *functional* relations. The significant contribution of reformational philosophy is that every modal functional law holds for whatever there is and whatever there is either has a subject function or an object function within all modes or aspects of reality – as explained in the Introduction of Gerrit Glas.

⁸ Cassirer mentions the example of a "round square" (Cassirer, 1910:16), but Kant already first introduced it in the following form: "a square circle is round / is not round" ("ein viereckiger Zirkel ist rund / ist nicht rund") (see Kant, 1783:341; § 52b).

⁹ Kock underscores the same point: "We believe, however, with the philosophy of the cosmomic idea, that religion (as pre-scientific root-dynamics) provides only orientation and direction to thought and that by it no single scientific problem is brought to a solution" (Kock, 1973:11; see page 12).

The modal universality of modal aspects is unspecified. When directing our theoretical attention at the modal aspects or functions of reality we are not classifying entities according to the kinds or *types* to which they belong. The mere distinction between economic and un-economic, for example, is not specified in any typical way. Diverse societal entities (such as universities, nuclear families, states and firms) have to observe economic principles (act frugally and avoid what is excessive). Both a state and a business can waste their money (and thus act un-economically) and both are called to function under the guidance of economic considerations of frugality.

Although we may differ about what norm-conformative or antinormative behaviour may be, such a difference of opinion presupposes the acceptance of the ontic reality of contraries like these. They are found in all post-psychical aspects where they analogically reflect the coherence between the logical and the other normative aspects of reality.

Whereas modal laws hold universally for all possible classes of entities, type laws only hold for a limited class of entities. Therefore the universality of type laws is specified. The law for being an atom or being a state holds universally for all atoms and all states, respectively. But this universality is specified because not everything in the universe is an atom or a state.

Kant already understood this distinction, for he distinguishes between (apriori) formal laws (thought categories – Kant's account of modal universality) and “empirical laws of nature” (individuality-structures) – where the former (apriori universal laws of nature) do not require special perceptions while the latter do presuppose particular observations (the equivalent of what leads positivism to its emphasis on *experimentation* – on the road to the discovery of type laws / individuality-structures).

Dooyeweerd's philosophy made a significant contribution to the analysis of the concept of a law and a principle. Let us now briefly explain some of the intricacies involved in such an analysis. The focus will first be on (natural) laws and then on (norming) principles. a) Natural laws

When it is asserted that modal laws hold universally (everywhere) the spatial aspect is prominent. Without an awareness of space we would be unable to understand the universality displayed by laws. Likewise, in spite of all the spectacular changes that occurred in the history of the universe, physics still has to acknowledge universal constants. The remarkable fact is that they are spread over the first four aspects as the basic units of measurement:

Number (mass / kilogramme)

Space (length / meter)

Kinematical (duration / velocity / second)

Physical (charge / quantum / energy)

Natural laws not only strike us in their universality and constancy (persistence) but also in their operation, in the effect they have on events and in the fact that they are valid in the sense of being in force. What is normally seen as the necessity of laws therefore relate to the universality of their effect and to their enduring being-in-force.

Clearly describing a law requires an awareness of number (it is *one* law), of space (its *universality*), its *persistence* (constancy) and that it *holds* (it is being *in force*). Without highlighting the aspects from which these terms are derived, the paleontologist Schindewolf contemplates the fact that geologists suggest that natural laws are subject to change and therefore not constant. His reaction is categorical: “If one defines the laws of nature as rules

according to which processes always take place in the same way everywhere, there can naturally be no question of mutability and development over time. It is only our formulation of the laws of nature that is mutable. As soon as we learn from experience that the concept of a law is not universally applicable because it is somehow contingent upon time, then the law should be excluded from the formulation” (Schindewolf, 1993:5).

From this brief analysis it is also clear that within the creation order no single law “stands on its own.” For example, the physical aspect of reality presupposes the aspects of number, space and movement, each with their own unique laws. In fact, the meaning of the physical aspect is constituted by its interconnections with non-physical aspects. For example, the first main law of thermodynamics, traditionally designated as the law of *energy conservation*, should actually be called the law of *energy constancy*, which displays a kinematic retrocipation (backward-pointing analogy) to the original meaning of the kinematic aspect of uniform (constant) motion (cf. Strauss 2011).

Summarising an extensive analysis may provide us with a complex definition of a “law of nature.” The compound or complex basic concept of a *natural law* may therefore be formulated as follows:

As a unique, distinct, and universally valid order for what is factually correlated with and subjected to it, a natural law constantly holds (either in an unspecified way as in the case of modal laws or in a specified way as in the case of type laws) within the domain in which it conditions what is subjected to it.

b) Norming principles

An analysis of the nature of cultural norms or principles has to follow the same path, because it is equally complex in the sense that it comprises terms derived from multiple modal aspects. We have noted that normativity always reflects the logical principle of non-contradiction. Furthermore, principles are not valid per se such as natural laws, because principles require human intervention to be made valid, to be enforced. Diverging philosophical traditions designate giving shape to pre-positive principles by positivizing them. Such positivizations ought to take unique historical circumstances into consideration. Conservatism sticks to positivized principles and is therefore reluctant to alter positivizations while a revolutionary approach attempts to break all connections with the past. Reformation by contrast observes both an element of continuity and an element of discontinuity in history. Within the science of law the legacy of natural law accepts above positive law another jural order supposedly holding for all times and places in its positivized form. Legal positivism, in turn, does not want to accept constant principles.

Insofar as norming principles are universal and constant they are not yet positivized – and insofar as they are positivized they are no longer universal in an unspecified sense of the word. Let us now look at an equally complex definition of a principle.

A principle is a universal and constant point of departure that can only be made valid through the actions of a competent organ (person or institution) in possession of an accountable (responsible) free will enabling a normative or antinormative application of the principle concerned relative to the challenge of a proper interpretation of the unique historical circumstances in which it has to take place (see Strauss, 2011a and 2011b).

Note that this formulation implicitly employs the gateway of various modal aspects – which underscores that the term *principle* is a complex or compound fundamental scientific concept

– in distinction from the elementary basic concepts in the various disciplines that only appeal to a single particular analogy within the structure of an aspect of reality. The nature of modal analogies, viewed within the context of a distinction between law/norm side and factual side, opens up the possibility of a philosophical analysis of modal principles. Every analogy on the law side of a normative aspect provides us with a fundamental modal principle.

Within the natural aspects of creation a similar coherence on the law-side could be discerned. The meaning of the physical aspect, for example, is constituted by its interconnections with non-physical aspects. The first main law of thermodynamics, traditionally designated as the law of *energy conservation*, should actually be called the law of *energy constancy*, which is (on the law-side) a kinematic retrocipation (backward-pointing analogy) to the original meaning of the kinematic aspect of uniform (rectilinear / constant) motion.

Regarding the philosophical foundations of the special sciences this method first of all requires an analysis of the analogical basic concepts of a discipline – also known as its elementary basic concepts. Examples of elementary basic concepts within the science of law are found in expressions such as *jural causality* (physical analogy of cause and effect within the jural aspect), *legal order* (arithmetical analogy), legal constancy and dynamics (kinematic and physical analogies taken in their mutual coherence), *legal differentiation* and *integration* (biotic analogy), *jural accountability* (logical-analytical analogy), *juridical expression* and *interpretation* (analogy of the sign mode), and *juridical economy* (avoiding what is excessive – economic analogy).

These concepts cut across all the subdivisions of law because they partake in the modal universality of the jural aspect. Once the elementary basic concepts have been analyzed a discipline should contemplate its *complex* or *compound basic concepts*, that is, those *totality concepts* erected by incorporating multiple elementary basic concepts at once. Concepts such as legal subject, legal object, legal personality and legal normativity are examples of compound basic concepts within the science of law. Only at this point the transition could be made to typical concepts, involving also the societal entities found within a differentiated society.

It should be kept in mind that Dooyeweerd first tested his new systematic philosophical distinctions within his own field of speciality, the discipline of law, before he made public his general philosophical distinctions and insights. Elaborating this immense task also embodies his positive appreciation of the meaning of the creation order for an inner reformation of the various academic disciplines.

Without an order of creation there could be no future

The general theme of the 2011 Conference in Amsterdam was captured in the question: “Is the idea of ‘creation-order’ still fruitful?” The key point in what we have discussed thus far is that without a creational order there is no future for the universe. This assessment entails that constancy is indeed appreciated as the condition for change and that we therefore have to avoid the postmodern emphasis on change at the cost of constancy. It may result in an emphasis on the *eschaton* at the cost of the *proton*. Olthuis correctly remarks:

The current eschatological orientation in theology which tends to seek even the beginning in the end will need revision. The Bible begins with Genesis and Genesis begins with creation. The Scriptures see the Gospel as the link connecting creation and consummation. And this

link between past and future is revealed as the Word which connects the end with the beginning, the consummation with the creation. “I am the Alpha and the Omega, the first and the last, the beginning and the end” (Rev. 22:12). A proper vision of the consummation requires a proper appreciation of the beginning. Without this understanding, the fulfilment lacks substantial content and tends to evaporate into pious words about hope. A non-robust view of creation emasculates the gospel, for it is the creation which is brought to fulfilment in Jesus Christ even as it began in him (see Strauss, 2009:198).

The distinction between *order for* (*law for*) and *orderliness of* (i.e. *law-conformity*) implicitly underscores the insight that without an order of creation there could be no future. Julian Huxley provides us with an example of confusing this distinction. In 1959, at the occasion of commemorating the appearance of Darwin's *Origin* in 1859 he said:

“This is one of the first public occasions on which it has been frankly faced that all aspects of reality are subject to evolution, from atoms and stars to fish and flowers, from fish and flowers to human societies and values – indeed, that all reality is a single process of evolution” (quoted from his lecture “The Evolutionary Vision” presented at the Convocation Ceremony that took place on Thanksgiving Day 1959).

Note the discrepancy between the claim that “all aspects of reality are subject to evolution” and the statement that “all reality is a single process of evolution”: the first one elevates “evolution” to an all-encompassing law to which all aspects of reality are subjected and the second one reduces all laws to what “all reality is”, namely “a single process of evolution”! Of course the latter statement is contradicted by the assumption that random mutation and natural selection have to be constants which determine the on-going process of evolution, for if these elements of constancy are not accepted, no evolutionary change would be possible. In other words, if “all reality is a single process of evolution” it does not allow for the determining and delimiting “law-role” of the combination of random mutation and natural selection.

Concluding remark

The long-standing insight that constancy lies at the basis of change contains the key to a positive interpretation of the future of the idea of a creational order. We argued that the Greek-Medieval legacy stumbled upon the difference between law for (Plato's ideas) and lawfulness of (Aristotle's universal substantial forms). However, the influence of modern nominalism undermined the idea of universality outside the human mind by stripping creation of its order for and orderliness of – thus depreciating factual reality into a state of chaotic structurelessness. The vacancy thus created was filled by elevating the human being to become a law unto itself – up to the extreme rationalistic position assumed by Kant in his claim that human understanding is the apriori formal law-giver of nature. The idea of a creational order reverts from an epistemic to an ontic perspective, which makes possible an alternative approach to the various dimensions of reality, known as the transcendental-empirical method. This method enables a new way to articulate the idea of a creational order or a law-order, illustrated by providing a definition of a natural law and norming principles. The future of the idea of a creational order depends on a proper understanding of the constancy and universality of such an order. Whenever an attempt is made to reduce the rich diversity of aspects and

entities within creation theoretical antinomies surface. The alternative option is to pursue a non-reductonist ontology.

References

- Appleby, J., Covington, E., Hoyt, D., Latham M. Sneider, A. 1996. *Knowledge and Postmodernism in Historical Perspective*. New York: Routledge
- Bohatec, J. 1940. Autorität und Freiheit in der Gedankenwelt Calvins. In: *Philosophia Reformata*, 5(1):1-28.
- Cassirer, E. 1910. *Substanzbegriff und Funktionsbegriff*. (Berlin), Darmstadt: Wissenschaftliche Buchgesellschaft, 1969.
- Cassirer, E. 1911. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*. Volume II. Berlin: Verlag Bruno.
- Cassirer, E. 1957. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit – Von Hegels Tod bis zur Gegenwart (1832-1932)*. Stuttgart: Kohlhammer.
- Cassirer, E. 1971. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*. Volume Two. 3rd edition, Darmstadt: Wissenschaftliche Buchgesellschaft.
- Comperz, T. 1964. *A history of ancient philosophy*. Seventh impression. London: William Clowes & Sons Ltd.
- Dooyeweerd, H. 1971. Cornelius Van Til and the transcendental critique of theoretical thought, in: Green, 1971:74-89.
- Dooyeweerd, H. 1997. *A New Critique of Theoretical Thought*, Collected Works of Herman Dooyeweerd, A Series Vols. I-IV, General Editor D.F.M. Strauss. Lewiston: Edwin Mellen.
- Dooyeweerd, H. 2012. Roots of Western Culture: Pagan, Secular and Christian options. Collected Works, Series B, Volume 15, General Editor D.F.M. Strauss. Grand Rapids: Paideia Press.
- Dooyeweerd, H. 2013. *Christian Philosophy and the Meaning of History*. Collected Works, Series B, Volume 13, General Editor D.F.M. Strauss. Grand Rapids: Paideia Press.
- Galileo, G. 1973. *Unterredungen und mathematische Demonstration über zwei neue Wissenszweige, die Mechanik und die Fallgesetze betreffend (1638)*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Holz, Fr. 1975. Die Bedeutung der Methode Galileis für die Entwicklung der Transzendentalphilosophie Kants, in: *Philosophia Naturalis*.
- Kant, I. 1783. *Prolegomena einer jeden künftigen Metaphysik die als Wissenschaft wird auftreten können*. Hamburg: Felix Meiner edition (1969).
- Kock, P. de B. 1973. *Christelike Wysbegeerte: Standpunte en Probleme*. Bloemfontein: VCHO.
- Kuyper, A. 1959. *Het Calvinisme (3rd impression)*, Kampen: Kok.
- Luckmann, T. & Berger, P.L. 1969. *The social construction of reality; a treatise in the sociology of knowledge*, London: Allen Lane.
- Schindewolf, O.H. 1993. *Basic Questions in Paleontology: Geologic Time, Organic Evolution, and Biological Systematics*, with a Foreword by Stephan Gould. Chicago: University of Chicago Press.
- Schnatz, H. 1973. *Päpstliche Verlautbarungen zu Staat und Gesellschaft, Originaldokumente mit deutscher Uebersetzung*, Edited by H. Schnatz. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schutz, H. 1974. *Der sinnhafte Aufbau der sozialen Welt*, Springer Verlag 1932, Frankfurt am Main: Suhrkamp.

- Strauss, D.F.M. 2009. *Philosophy: Discipline of the Disciplines*. Grand Rapids: Paideia Press.
- Strauss, D.F.M., 2011. Relasiebegrippe in die lig van die vraag of Einstein in die eerste plek 'n "relatiwiteitsteorie" ontwikkel het, *Suid-Afrikaanse Tydskrif vir Natuurwetenskap en Tegnologie* 30(1), Art. #28, 8 pages. doi:10.4102/satnt.v30i1.28.
- Strauss, D.F.M., 2011a. Normativity I – The Dialectical Legacy. In: *South African Journal of Philosophy*, 30(2):207-218.
- Strauss, D.F.M., 2011b. Normativity II – An integral approach. In: *South African Journal of Philosophy*, 30(3):105-128.
- Van Peursen, C.A. 1995. Dooyeweerd en de wetenschapsfilosofiese discussie. In: *Dooyeweerd herdacht*, edited by J. De Bruin, Amsterdam: VU-Uitgeverij (pp.79-94).
- Veenhof, C. 1939. In *Kuyper's Lijn*. Oosterbaan: Goes.
- Vollenhoven, D.H. 1933. *Het Calvinisme en de Reformatie van de Wijsbegeerte*. Amsterdam: H.J. Paris.
- Von Weizsäcker, C.F. 2002. *Große Physiker, Von Aristoteles bis Werner Heisenberg*. München: Deutscher Taschenbuch Verlag.
- Wang, H. 1988: *Reflections on Gödel*. Cambridge Massachusetts: MIT Press.
- Zwaan, J. 1977. On evolution and evolutionism, in *Beweging*, Year 41, no.3, June, page 40.